Amendment to the Claims:

The claims under examination in this application, including their current status and changes made in this paper, are respectfully presented.

1-4 (canceled).

- 5 (previously presented). The method of claim 27, wherein the reacting step results in a coating in the form of a monolayer.
- 6 (previously presented). The method of claim 27, wherein the oxidized surface is selected from the group consisting of: metals, semimetals, transition metals, ceramics, alloys thereof, and any combination thereof.

7 (canceled).

- 8 (currently amended). The method of claim 27, wherein the second constituent is selected from the group consisting of: esters, amides, organic acids, phenolates, thiolates, phosphonates, alkoxides, and any combinations thereof.
- 9 (previously presented). The method of claim 27, wherein the nucleophilic molecule is selected from the group consisting of: alcohols, amines, carboxylic acid, phenols, thiols, phosphonic acids, and any combinations thereof.

10 (canceled).

- 11 (previously presented). The method of claim 27, wherein the first constituent comprises Si.
- 12 (previously presented). The method of claim 11, wherein the active species comprises Si(OCH₂CH₃)₄ and the nucleophilic molecule comprises an alcohol.

13 - 21 (canceled).

22 (previously presented). The method of claim 27, wherein the reacting step is performed at a temperature above an environmental temperature to which the coating is expected to be exposed.

23 - 26 (canceled).

- 27 (currently amended). A method of passivating an oxidized surface, comprising the steps of:
- applying an active species comprising a compound of a first constituent and a second constituent to the oxidized surface, the first constituent being a metal, semimetal, transition metal, or a ceramic, and the second constituent being a reactive group, so that the first constituent covalently bonds with the oxidized surface and the reactive group is exposed; and
- then reacting a nucleophilic molecule with the exposed reactive group to displace the exposed reactive group, and to covalently bond the nucleophilic molecule with the first constituent.
- 28 (previously presented). The method of claim 27, wherein the applying step is performed by vapor phase deposition.
- 29 (previously presented). The method of claim 27, wherein the compound of the active species further comprises an inert substituent.
- 30 (previously presented). The method of claim 27, wherein the applying step is performed by a high vacuum system.
- 31 (currently amended). The method of claim 27, wherein the reacting step comprises flooding the surface with the nucleophilic molecule in large excess.
- 32 (currently amended). The method of claim 12, wherein the alcohol is a long chain organie long-chain-alcohol.
- 33 (previously presented). The method of claim 12, wherein the applying step is performed at a temperature from 180° C to 220° C.

- 34 (currently amended). The method of claim 33, wherein the applying step is performed by delivering the compound in the vapor phase under reduced pressure.
- 35 (previously presented). The method of claim 12, wherein the second constituent comprises ethoxy groups.